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09/617,817	07/17/2000	Yousuf Saifullah	017.38719X00	8282

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EXAMINER

VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/617,817

Applicant(s)

SAIFULLAH ET AL.

Examiner

Thong H. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Claims 1-47 are pending.

***Drawings***

2. The drawings filed 4/25/05 is accepted by examiner.

***Claim Rejections - 35 USC § 112***

3. Claim1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It was unclear what device generates a first message, and what device transfers the second )

***Response to Arguments***

4. Applicant's arguments filed 4/25/05 have been fully considered but they are not persuasive to overcome the prior art.

A. Applicant argues the prior art does not “encapsulated the second message to form the third message”.

Examiner notes the prior art taught the message transport form PSTN to gateway to Internet. It was obvious that the message has been converted/ transformed/ proxy/ transcoded/ encoded / encapsulated to delivery to destination node (i.e.: IP-host 2)  
[Ludwig, Fig Fig 6]

B. Applicant argues the prior art does not “extracting at the gateway” and does not specific as to where such the extraction process occurs.

Examiner notes the prior art taught “extracting at the user device”. It was clearly that the extracting process either at the user device or network devices (gateway,

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server) This was a design choice and unpatentable (*see : Rearrangement of location of parts- In re Japikse, 86 U.S.P.Q. 70*).

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,3-13,15-26,28-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Ludwig et al [Ludwig 6,697,352 B1].

5. As per claim 1, Ludwig discloses a method for carrying call control information after a call handover from an Internet Protocol (IP) packet switched network to a circuit switched cellular network [Ludwig, Internet telephone, col 6 lines 46-65] comprising:

generating a first message containing call control information, the first message being of an IP-based protocol [Ludwig, control information, col 2 lines 10-32];

encapsulating the first message into a second message [Ludwig, embedded into packets of the layer +n, col 9 lines 36-46 or IP host using PCMCIA connected to mobile station, col 2 line 61-col 3 line 35];

transferring the second message to a network element, the network element being part of a circuit switched cellular network (PSTN) [Ludwig, modem connected to PSTN, col 3 lines 1-10];

transferring the third message to a gateway [Ludwig, gateway to Internet, col 3 lines 1-10];

extracting, at the gateway, the first message from the third message [Lugwig, extracted or decapsulation, col 2 lines 34-38];

sending the first message to a server or destination, the first message is carried through the circuit switched network transparently [Ludwig, a transparent circuit-switched GSM, col 4 lines 38-51].

6. As per claims 3,15,28 Ludwig-Schuster disclose the circuit switched cellular network is a Global System for Mobile Communications (GSM) network [Ludwig, GSM , col 4 lines 39-51].

7. As per claims 4,16 Ludwig-Schuster disclose the second message comprises a User Information message (MSC receives the user information message, specification pp 9 line20) [Ludwig, MSC, col 3 lines 25-35].

8. As per claims 5,17 Ludwig-Schuster disclose the third message comprises a Map\_ Process\_Access \_Sig message (i.e: mobile switching center sends

Map\_Process\_Access\_Sig message to gateway, *specification page 9 line 19-page 10 line 4*) [Ludwig, MSC, col 3 lines 25-35].

9. As per claims 6,18,29 Ludwig-Schuster disclose the circuit switched cellular network is an IS-41 network as inherent feature of circuit switched cellular.

10. As per claims 7,19,30 Ludwig-Schuster disclose the circuit switched cellular network is an IS-136 network as inherent feature of circuit switched cellular.

11. As per claim 8, Ludwig-Schuster disclose the generating and first encapsulating are performed at a user device [Ludwig, encapsulated, col 5 lines 38-51].

12. As per claims 9,21 Ludwig-Schuster disclose the user device comprises a mobile device [Ludwig, MSC, col 3 lines 25-35].

13. As per claims 10,22,26 Ludwig-Schuster disclose the user device comprises one of a mobile phone, a portable computer, and a Personal Digital Assistant (PDA) [Ludwig, MSC, col 3 lines 25-35].

14. As per claims 11,20,23,31 Ludwig-Schuster disclose the IP packet switched network comprising an IP packet switched mobile network [Ludwig, MSC, col 3 lines 25-35, Fig 6].

15. As per claims 12,24,32 Ludwig-Schuster disclose the network element comprising a Mobile Switching Center (MSC) [Ludwig, MSC, col 3 lines 25-35].
16. As per claim 35, Ludwig-Schuster disclose a call processing server, the call processing server being part of the first packet switched network [Ludwig, PSTN, col 2 line 60-col 3 line 10].
17. As per claim 36, Ludwig-Schuster disclose a first packet switched gateway, the first packet switched gateway being part of the first packet switched network and operatively connected to the call processing server [Ludwig, gateway, col 2 line 60-col 3 line 10].
18. As per claim 37, Ludwig-Schuster disclose a serving node, the serving node being part of the second packet switched network and operatively connected to the radio access network and the first packet switched gateway, the serving node capable of carrying the packets between the at least one user device through the radio access network and the first packet switched gateway [Ludwig, GPRS support node, col 7 lines 22-35; gateway, col 2 line 60-col 3 line 10].
19. As per claim 38, Ludwig-Schuster disclose a second packet switched gateway operatively connected to the serving node and the call processing server, the second

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packet switched gateway capable of carrying the packets between the serving node and the call processing server [Ludwig, gateway, col 2 line 60-col 3 line 10].

20. As per claim 39, Ludwig-Schuster disclose the first packet switched gateway comprising a third generation (3G) IP gateway [Ludwig, gateway, col 2 line 60-col 3 line 10].

21. As per claims 40,41 Ludwig-Schuster disclose a serving GPRS support node [Ludwig, GPRS support node, col 7 lines 22-35].

22. As per claim 42, Ludwig-Schuster disclose the second packet switched gateway comprises a second generation (2G) IP gateway [Ludwig, gateway, col 2 line 60-col 3 line 10].

23. As per claim 43, Ludwig-Schuster disclose the second packet switched network comprises a General Packet Radio Service (GPRS) network [Ludwig, GPRS, col 7 lines 22-35].

24. As per claim 13, a method for carrying call control information after a call handover from an Internet Protocol (IP) packet switched network to a circuit switched cellular network comprising:



generating, at an IP packet switched network, a first message containing call control information, the first message being of an IP-based protocol [Ludwig, PSTN, gateway, ISP, col 3 lines 1-10; control information, col 8 lines 54-62];

encapsulating, at a gateway, the first message into a second message  
encapsulating, at the gateway, the second message into a third message [Ludwig, encapsulated, col 5 lines 38-51; PSTN, gateway, ISP, col 3 lines 1-10];

transferring the third message to a network element, the network element being part of a circuit switched cellular network [Ludwig, a Circuit switched GSM data service, col 4 lines 39-51];

transferring the second message to a user device (i.e.: IP-host 2); extracting, at the user device, the first message from the second message [Ludwig, the user data is extracted, col 2 lines 34-38, IP-host 2, Fig 6]; and

sending the first message to an application at the user device, wherein the first message is carried through the circuit switched network transparently [Ludwig, a transparent Circuit switched GSM data service, col 4 lines 39-51].

As per claim 25, Ludwig discloses A system for carrying call control information after a call handover from an Internet Protocol (IP) packet switched network to a circuit switched cellular network comprising:

- an IP packet switched network, the IP packet switched network including a processing server, the processing server capable of processing IP-based protocol messages [Ludwig, PSTN, gateway, ISP, col 3 lines 1-10];

- a network element, the network element being part of a circuit switched cellular network [Ludwig, Circuit switched GSM data service, col 4 lines 39-51;
- a gateway, the gateway operatively connected to the IP packet switched network and the circuit switched cellular network, the gateway capable of encapsulating an IP-based protocol message into a payload of a second message, the gateway further capable of extracting an IP-based protocol message from a payload of another message [Ludwig, gateway, col 3 lines 1-10];
- at least one user device, capable of transmitting and receiving to/from the IP packet switched network and the circuit switched cellular network, the at least one user device capable of encapsulating an IP-based protocol message into a payload of a second message, the at least one user device further capable of extracting an IP-based protocol message from a payload of another message, wherein the IP-based protocol message comprises call control information that is encapsulated, transparently carried through the switched cellular network, and extracted, the call control information being carried between the IP packet switched network and the at least one user device [Ludwig, the user data is extracted, col 2 lines 34-38; control information, col 8 lines 54-62; a transparent Circuit switched GSM data service, col 4 lines 39-51; control information, col 8 lines 54-62].

As per claim 33, Ludwig discloses A system for carrying call control information after a call handover from an Internet Protocol (IP) packet switched network to a circuit switched cellular network comprising:

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- a first packet switched network [Ludwig, PSTN, col 3 lines 1-10];
- a circuit switched cellular system, the circuit switched cellular system comprising a circuit switched cellular network and a second packet switched network [Ludwig, circuit switched GSM, col 4 lines 39-51, Internet, Fig 6];
- at least one user device, the at least one user device operatively connected to the IP packet switched network and the circuit switched cellular system, wherein call control information is carried in packets between the IP packet switched network and the at least one user device transparently through the second packet switched network [Ludwig, control information, col 8 lines 54-62; a transparent Circuit switched GSM data service, col 4 lines 39-51].

As per claim 44, Ludwig discloses An article comprising a storage medium having instructions stored therein, the instructions when executed causing a computing device to perform at least one of:

- generating a first message containing call control information, the first message being of an IP-based protocol [Ludwig, Internet telephone, col 6 lines 46-65];
- encapsulating the first message into a second message [Ludwig, encapsulated, col 5 lines 38-51]; and
- transferring the second message to a network element, the network element being part of a circuit switched cellular network [Ludwig, circuit switched GSM, col 4 lines 39-51]; and
- receiving a second message from a network element, the network element being

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part of a circuit switched cellular network [Ludwig, circuit switched GSM, col 4 lines 39-51], the second message containing a first message, the first message containing call control information [Ludwig, control information, col 8 lines 54-62], the first message being of an IP-based protocol [Ludwig, Internet telephone, col 6 lines 46-65]; and extracting the first message from the second message [Ludwig, the user data is extracted, col 2 lines 34-38], wherein the first message is carried between a user device and a packet switched network through the circuit switched cellular network transparently [Ludwig, a transparent Circuit switched GSM data service, col 4 lines 39-51, ISP, Fig 6].

As per claim 45, Ludwig discloses An article comprising a storage medium having instructions stored therein, the instructions when executed causing a computing device to perform at least one of:

- receiving a second message from a network element, the network element being part of a circuit switched cellular network [Ludwig, circuit switched GSM, col 4 lines 39-51], the second message containing a first message, the first message containing call control information, the first message being of an IP-based protocol [Ludwig, Internet telephone, col 6 lines 46-65];
- extracting the first message from the second message [Ludwig, the user data is extracted, col 2 lines 34-38]; and
- sending the first message to a server in a packet switched network [Ludwig, the user data is extracted, col 2 lines 34-38]; and

- receiving a first message from a packet switched network, the first message containing call control information, the first message being of an IP-based protocol [Ludwig, PSTN to ISP to gateway, col 3 lines 1-10];
- encapsulating the first message into a second message; encapsulating the second message into a third message [Ludwig, PSTN, gateway, ISP, col 3 lines 1-10]; and carrying the third message to a network element (i.e.: IP-host 2) , the network element being part of a circuit switched cellular network, wherein the first message is carried between a user device and a packet switched network through the circuit switched cellular network transparently [Ludwig, a transparent Circuit switched GSM data service, col 4 lines 39-51, Fig 6].

As per claim 46, Ludwig discloses A method for carrying call control information after a call handover from a circuit switched cellular network to an Internet Protocol (IP) packet switched network comprising:

- generating a first message containing call control information, the first message being of a circuit switched protocol [Ludwig, the mobile station connected to PSTN, col 2 lines 61-col 3 line 10]
- encapsulating the first message into a second message; transferring the second message to a server in an IP packet switched network [Ludwig, PSTN to ISP to gateway, col 3 lines 1-10];
- transferring the second message to a gateway network [Ludwig, gateway to Internet, col 3 lines 1-10];

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- extracting, at the gateway, the first message from the second message network [Ludwig, the user data is extracted, col 2 lines 34-38]; and
- sending the first message to a network element, the network element being part of a circuit switched cellular network [Ludwig, circuit switched GSM, col 4 lines 39-51]; wherein the first message is carried through the packet switched network transparently [Ludwig, a transparent data service, col 4 lines 39-51, Fig 6].

As per claim 47, Ludwig discloses A method for carrying call control information after a call handover from an Internet Protocol packet switched network to a circuit switched cellular network comprising:

- generating, at a network element, a first message containing call control information [Ludwig, control information, col 2 lines 10-32], the network element being part of a circuit switched cellular network [Ludwig, circuit switched GSM, col 4 lines 39-51]; encapsulating, at a gateway, the first message into a second message [Ludwig, gateway to Internet, col 3 lines 1-10];
  - transferring the second message to a server in an IP packet switched network [Ludwig, gateway to Internet, col 3 lines 1-10];
- transferring the second message to a user device [Ludwig, Fig 6];
- extracting, at the user device, the first message from the second message [Ludwig, the user data is extracted, col 2 lines 34-38]; and

- sending the first message to an application at the user device, wherein the first message is carried through the packet switched network transparently [Ludwig, a transparent data service, col 4 lines 39-51, Fig 6].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 2,14,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al [Ludwig 6,697,352 B1] in view of Yang [6,788,675 B1].

26. As per claims 2,14,27 Ludwig does not explicitly disclose the IP-based protocol is one of a Session Initiation Protocol (SIP) and a H.323 protocol.

It was well-known in the art that an IP-base or Internet telephone network using the SIP or H.323 protocol [see Yoakum, SIP and transparent to SS7/IP gateway, col 6 lines 5-67; Yang, col 6 lines 42-50; col 11 lines 5-25]

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the SIP message sending transparently over gateway as taught by Yang into the Ludwig's apparatus in order to improve the Internet telephony system. Doing so would provide a quick, simple and efficiency process to handling traffic in an Internet telephony system.

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27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rupal Dharia*, can be reached at (571) 272-3880. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
*Patent Examiner*  
*Art Unit 2142*

A handwritten signature in black ink, appearing to read 'Thong Vu', with a horizontal line underneath.